

REMARKS/ARGUMENTS

Claims 1-18 were pending in this application and examined.

Applicant has amended claims 2, 5, 7, 8, 11, and 13-18. New claims 19 and 20 have been added. Claims 1-20 remain pending in this application after entry of this amendment. The specification has also been amended. No new matter has been added by the amendments.

THE SPECIFICATION

The specification has been amended to insert application information for the cross-referenced application and to correct inadvertently introduced typographical errors. Applicant submits that no new subject matter has been added by the amendments.

THE CLAIMS

Rejections under 35 U.S.C. 102(e)

Claims 5-6, 11-12, and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Rawat et al. (U.S. Patent No. 6,662,340) (hereinafter "Rawat"). Applicant respectfully traverses the rejections.

Claim 5

Applicant submits that claim 5, as amended, is not anticipated by Rawat. For example; amended claim 5 recites:

5. A computer-implemented method of processing electronic forms, the method comprising:
 - determining a first descriptor associated with a first field of a first electronic form;
 - determining first information entered in the first field on the first electronic form;
 - determining if user information stored for a user comprises an identifier corresponding to the first descriptor;
 - updating the user information to include an identifier corresponding to the first descriptor upon determining that the user information does not comprise an identifier corresponding to the first descriptor; and

updating the user information to include the first information, wherein the first information is associated with the identifier corresponding to the first descriptor. (Applicant's claim 5, emphasis added)

As recited above in claim 5, a "first descriptor" is determined associated with a "first field" in the "first electronic form". A determination is made if the "user information" stored for a user comprises an identifier corresponding to the first descriptor. If the user information does not include such an identifier, then the user information is updated to include an identifier corresponding to the first descriptor. The user information is also updated to include the "first information" entered in the first field and the "first information" is associated with the identifier corresponding to the first identifier.

As recited in claim 5, the user information is automatically updated to include information (e.g., an identifier corresponding to a descriptor for a field and associated information entered in the field) for a field and associated descriptor that does not have corresponding information stored in the user information. As the user fills out an electronic form comprising a field associated with a new descriptor, the user information is supplemented with an identifier corresponding to the new descriptor and corresponding information entered in the field. The updated user information can subsequently be used for automatically filling electronic forms. In this manner, as the user fills out forms, information corresponding to fields with new descriptors is automatically added to the user information. The updated user information helps expand the fields that can be automatically filled in. By automatically updating the user information, as recited in claim 5, the system adapts itself to fields with new descriptors thereby expanding the automatic form-filling capability.

Applicant submits that at least the features discussed above for claim 5 are not anticipated by Rawat. Rawat is not concerned with updating any user information. Rawat discloses a system for automatically filling out fields of a form with appropriate data from a user profile, without requiring prior mapping or examination of the form. This is done by examining the label text that is visually nearest to the fields. (See Rawat: Abstract; Summary). The "user profile" disclosed in Rawat is used to retrieve data and populate the form fields (See Rawat: col. 5 lines 45-56; col. 9 lines 57-60).

However, Applicant submits that there is no teaching in Rawat of updating the "user profile". The description in Rawat is limited to teaching that data in the user profile is used to fill in form fields but does not teach anything about updating the user profile itself. As a result, Rawat also does not teach determining if the user profile comprises an identifier corresponding to a particular field descriptor, as recited in claim 5. Further, Rawat does not teach anything about updating a user profile to include an identifier corresponding to a field descriptor (if not already present) and to include the information entered in the field associated with the descriptor, as recited in claim 5.

Consequently, Applicant submits that at least the features of "determining if user information stored for a user comprises an identifier corresponding to the first descriptor", "updating the user information to include an identifier corresponding to the first descriptor upon determining that the user information does not comprise an identifier corresponding to the first descriptor", and "updating the user information to include the first information, wherein the first information is associated with the identifier corresponding to the first descriptor" recited in claim 5 are not taught or suggested by Rawat.

For at least the reasons stated above, Applicant submits that claim 5 is not anticipated by Rawat and is in a condition for allowance.

Applicant further submits that the above-recited features of claim 5 are also not anticipated by Maxwell (as discussed below with respect to claim 1) nor would they have been obvious to a person having ordinary skill in the art at the time the invention was made.

Claims 6, 11-12, and 17-18

Applicant submits that independent claims 11 and 17 are also patentable for at least a similar rationale as discussed above for claim 5, and others.

Applicant further submits that dependent claims 6, 12, and 18 that depend from claims 5, 11, and 17 respectively, are also patentable over Rawat for at least a similar rationale as discussed for the allowability of the independent claims. The dependent claims are also patentable for additional reasons.

Rejections under 35 U.S.C. 103

Claims 1-4, 7-10, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rawat in view of Maxwell et al. (U.S. 6,589,290) (hereinafter "Maxwell"). Applicant traverses the rejections.

Claim 1

As previously described, one of the inventive aspects of the invention is that information stored for a user ("user information") is automatically updated by adding a identifier corresponding to a descriptor associated with a field. For example, claim 1 recites (in part):

1. A computer-implemented method of processing electronic forms, the method comprising:
...
identifying at least a second descriptor associated with a field in the first electronic form that does not have a corresponding identifier in the set of identifiers stored for the user;
determining a second value entered in the field associated with the second descriptor; and
including an identifier corresponding to the second descriptor in the set of identifiers stored for the user, wherein the second value is associated with the identifier corresponding to the second descriptor. (Applicant's claim 1, emphasis added)

As recited in claim 1, a second descriptor associated with a field in the first electronic form is identified that does not have a corresponding identifier in the set of identifiers stored for the user. A second value entered in the field associated with the second descriptor is determined. An identifier corresponding to the second descriptor is then included in the set of identifiers stored for the user and the second value is associated with the added identifier. In this manner, the user information (that comprises the set of identifiers) is updated with the identifier corresponding to the second descriptor and the associated value.

As recited in claim 1, the user information is updated to include information (e.g., an identifier corresponding to a descriptor for a field and associated value entered in the field) for a descriptor that does not have corresponding information stored in the user information. The updated user information can subsequently be used for automatically filling electronic forms. The updated user information helps expand the fields that can be automatically filled-in thereby expanding the automatic form-filling capability.

As discussed above with respect to claim 5, Applicant submits that at least the feature of updating the user information is not disclosed by Rawat. Applicant further submits that the deficiencies of Rawat are not cured by Maxwell.

Maxwell teaches techniques for populating a form. The data receptacles (a.k.a. form fields) of a form are filled with data when the user executes a data population command. In Maxwell, the form completion program obtains an image of the form to be filled and then searches for a template file that resembles the form image to within a certain threshold. (Maxwell: Abstract; Summary) The form completion program utilizes the template file to identify what kind of data to insert into each of the form's data receptacles. Once the form completion program successfully identifies what kind of data to insert into each data receptacle the program begins to input appropriate kind of data into the appropriate data receptacle. (Maxwell: col. 14 lines 61).

The Office Action alleges that col. 14 lines 29-61 of Maxwell teaches a set of identifiers, as recited in claim 1. Applicant respectfully disagrees. Applicant submits that this section of Maxwell describes how a "template file" is used to identify what kind of data to insert into each form receptacle. This section does not teach any "user information" comprising a "set of identifiers" stored for a user as recited in claim 1. Further, this section of Maxwell fails to teach anything about "including an identifier corresponding to the second descriptor in the set of identifiers stored for the user, wherein the second value is associated with the identifier corresponding to the second descriptor" as recited in claim 1.

The Office Action further alleges that col. 15 lines 5-56 and col. 17 lines 1-18 of Maxwell teach updating of user information (see rejection of claim 4). Applicant again respectfully disagrees.

In col. 15 lines 5-56, Maxwell describes information that is used by the form completion program during execution. This section discloses two subdirectories: "user" and "data" (Maxwell: col. 5 lines 18-20). The "user" subdirectory contains subdirectories storing information for users. Each subdirectory contains one file called by the login name of the user, followed by the extension ".dat". This file includes data about the user such as address, credit card information, electronic money, etc. (Maxwell: col. 15 lines 18-25).

The "data subdirectory" contains general information utilized by the form completion program during execution (Maxwell: col. 15 lines 18-20, lines 25-32). A "domain subdirectory" within the data subdirectory stores information that is used by the form completion program to populate a form (Maxwell: col. 15 lines 33-40).

Applicant however submits that the "user subdirectory" and the "data subdirectory" disclosed by Maxwell are both substantially different from the "user information" recited in claim 1. The data subdirectory is not stored for a user. Further, Maxwell does not teach that the data subdirectory or the user subdirectory comprises a set of identifiers including an identifier corresponding to a field descriptor, as recited in claim 1. Additionally, there is no teaching in Maxwell that the data subdirectory or the user subdirectory is updated by adding an identifier corresponding to a descriptor associated with a field of a form, as recited in claim 1. Accordingly, Applicant submits that col. 15 lines 5-56 of Maxwell does not disclose or suggest the features recited in claim 1.

In col. 17 lines 1-18, Maxwell describes an "update operation" depicted as references 610 and 611 in Fig. 6 of Maxwell. Applicant submits that this "update operation" has nothing to do with updating user information, as recited in claim 1. As described in Maxwell,

"during an update operation 611 the form completion program checks to see if the version of the program currently executing is the most recent version available. . . . If the form completion program currently executing is in need of a version update, the program starts an update thread to handle the update process. When execution of the update process is complete, the form completion program running is the most recent version." (Maxwell: col. 17 lines 1-14)

As is evident from the above, the "update operation" does not teach the features recited in claim 1. This section of Maxwell does not describe updating user information but rather describes updating the version of the form completion program.

Based upon the above, Applicant submits that the features recited in claim 1, such as including an identifier corresponding to a descriptor in the information stored for the user, are not taught or suggested by Maxwell. Further, even if Rawat and Maxwell were combined as suggested by the Office Action (although there appears to be no motivation in the references for the combination), the resultant combination would not teach or suggest the features recited in claim 1. For example, at least the feature of "including an identifier corresponding to the second

descriptor in the set of identifiers stored for the user, wherein the second value is associated with the identifier corresponding to the second descriptor" would not be taught or suggested by the combination.

Applicant thus submits that claim 1 is patentable over a combination of Rawat and Maxwell.

Claims 2-4, 7-10, and 13-16

Applicant submits that independent claims 7 and 13 are also patentable for at least a similar rationale as discussed above for claim 1, and others.

Applicant further submits that dependent claims 2-4, 8-10, and 14-16 that depend from claims 1, 7, and 13 respectively, are also patentable over a combination of Rawat and Maxwell for at least a similar rationale as discussed for the allowability of the independent claims. The dependent claims are also patentable for additional reasons.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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